A Revision of the New World Genus *Formicilla*[1]

(Coleoptera: Anthicidae)

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The genus *Formicilla*, designated for *F. munda* LeConte, is now distinct due to the removal of most of the neotropical species which had accumulated in the genus to the *leporinus*- and *scitulus*-groups of *Acanthinus* (Werner 1960, 1970). Beal (1950) had defined the genus for the United States. However, due to the removal by Werner of two species included in Beal's paper and the anatomical similarities of the remaining United States species, the need for more study of the relationships within the genus was indicated.

Formicilla is here defined as those New World Anthicidae with mesosternum expanded laterally; a tuft of long curved setae on inner margin of mesepisterna reaching humeral angle; pronotum deeply constricted in basal half; surface polished, with little pubescence; long, tactile setae; right mandible with single to triple tooth in middle of cutting edge; last segment of maxillary palpi securiform; simple tegmen of aedeagus.

The species of *Formicilla* are here separated into two groups with the *bruchi*-group containing a single species, *F. bruchi* Pic, and the *munda*-group containing the remaining. The *bruchi*-group is distinct in having a deep depression on the dorsum of the pronotum and in having the gonopore armature separated into two lateral sclerites and a biarmed sclerite. The *munda*-group is characterized by having a shallow depression or no depression on the dorsum of the pronotum and the gonopore armature consisting of a biarmed sclerite.

Both external and genitalic characters were used in defining species. The tegmina of the various species are very similar, but differences in the gonopore armature were noted and can be used for identification. The gonopore armature is best seen when the genitalia are withdrawn and cleared in KOH and then examined with a compound microscope. For best viewing the internal sac should be teased free of the phallobase so that it can be viewed from all angles. The internal sac in all species has an area of small, anteriorly projecting spines completely encircling it. The aedeagus is bilaterally symmetrical.

The populations of *Formicilla munda* in the United States vary in color, which resulted in the species *F. gilensis* and *F. evanescens* being

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designated by Casey. The main difference was that *F. munda* and *F. evanescens* were relatively light in color while the intervening *F. gilensis* was darker. More extensive collecting has revealed that light populations occur in Texas, along the lower Colorado River, the San Joaquin Valley of California and in Nayarit, Mexico. Dark populations occur in the Sacramento Valley of California, from Arizona to Sinaloa, Mexico and in Morelos, Mexico. Areas of intergradation of color were found in all cases. Examination of the gonopore armature of specimens from all populations revealed they are similar and distinct from all other species. The anatomical similarities and the devaluation of color led me to conclude that the names *gilensis* and *evanescens* should be treated as synonyms of *F. munda.*

The holotypes are to be deposited in the California Academy of Sciences.

I would like to thank Dr. Floyd Werner for his help and encouragement in the preparation of this paper.

KEY TO THE SPECIES OF FORMICILLA

1. Dorsum of pronotum with deep depression at area of constriction (Fig. 1a); pubescence elevated at 30 degree angle or greater; gonopore armature with lateral sclerites separated from biarmed sclerite. Northeastern Argentina. (*bruchi*-group) .... *bruchi* Pic

   Dorsum of pronotum with shallow or no depression at area of constriction (Fig. 1b); pubescence variable; gonopore armature consisting of biarmed sclerite (*munda*-group) 2

2. Pubescence on flanks of elytra approximately two-thirds as long as tactile setae, elevated at 30 degree angle. Westcentral Mexico .... *longipilosa* Chandler n. sp.

   Pubescence on flanks of elytra appressed to elevated at 30 degree angle, but always distinctly less than half the length of tactile setae 3

3. Pubescence appressed, short; elytral postbasal transverse impression indistinct (Fig. 2b). Venezuela to Argentina .... *grandiceps* Pic

   Pubescence raised from surface at 10 to 30 degree angle; elytral postbasal transverse impression distinct in lateral view (Fig. 2a) 4

4. Elytral markings in form of spots, posterior marking small; gonopore armature thick in lateral view and with broad projections (Fig. 6). Central to Northcentral Mexico .... *vitrea* Chandler n. sp.

   Elytral markings in form of complete bands across elytra; gonopore armature narrow in lateral view (Figs. 5, 8) 5

5. Eyes large, round except truncate at base of mandibles (Fig. 3a); gonopore armature in lateral view with no projections visible. Michoacan, Mexico .... *alta* Chandler n. sp.

   Eyes smaller, round to oval (Fig. 3b); gonopore armature with distinct projections in lateral view. Central Mexico to California and Texas .... *munda* LeConte

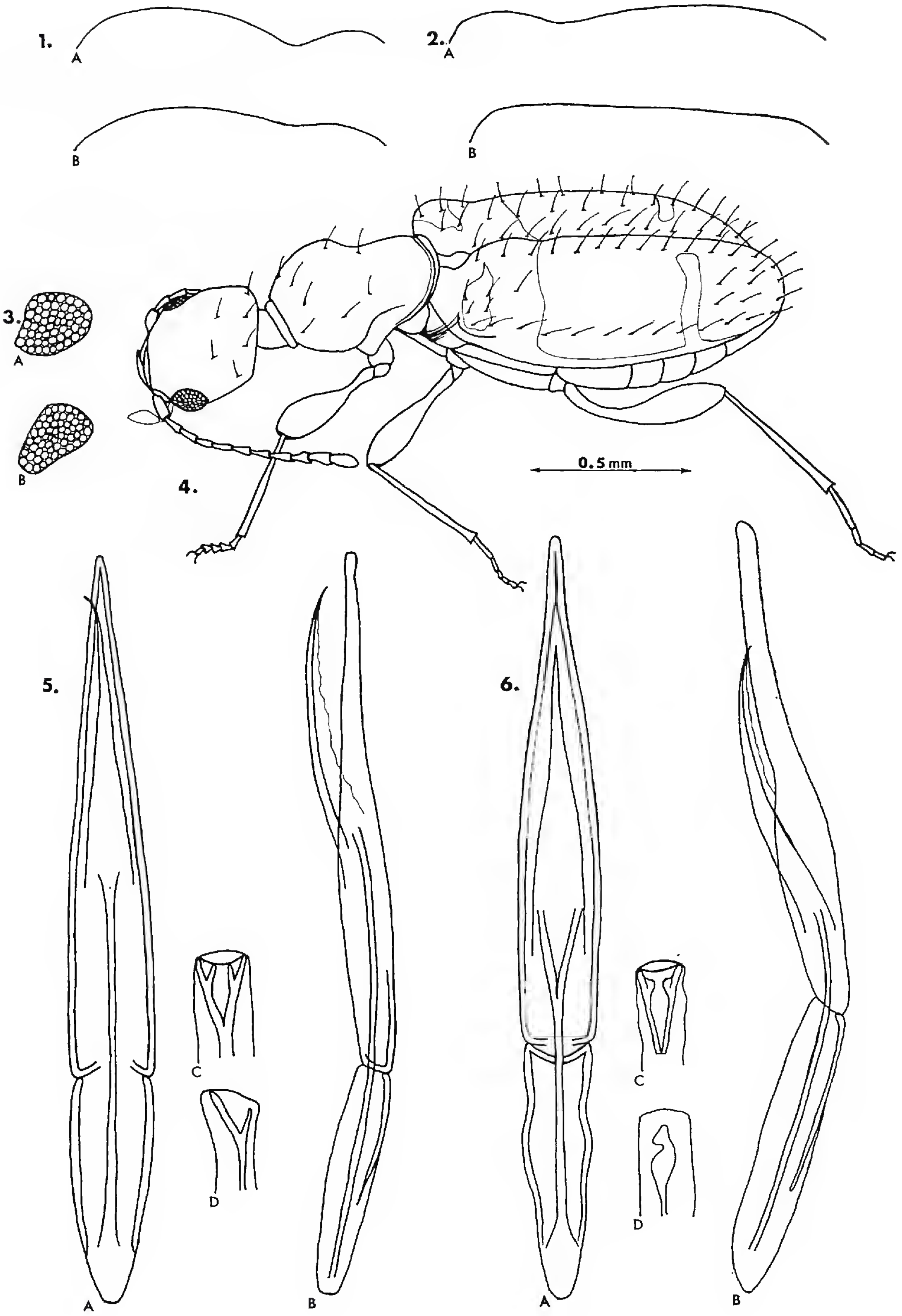

FIG. 1. Lateral view pronotum of: a. *F. bruchi*; b. *F. munda*. FIG. 2. Lateral view elytra: a. *F. munda*; b. *F. grandiceps*. FIG. 3. Eye of: a. *F. alta*; b. *F. munda*. FIG. 4. Lateral view *F. munda*. FIGS. 5–6. Genitalia: a. ventral view, b. lateral view; gonopore armature: c. ventral view, d. lateral view. FIG. 5. *F. munda*. FIG. 6. *F. vitrea*.

FORMICILLA BRUCHI Pic

(Figs. 1a, 10)

Formicilla Bruchi [sic] Pic 1904, 329 (Type loc.: Prov. Buenos Aires, Argentina); 1911, 22. Bruch 1917, 463; 1928, 193.
Formicilla bruchi, Werner 1965, 3, 11.

Polished and sparsely punctate, head and pronotum castaneous with appendages of similar color, elytra fuscorufous with luteous marking on area of postbasal transverse impression of each elytron, sometimes with lighter area around scutellum but not reaching elytral markings.

MALE.—Llavalol, Argentina: 2.61 mm long, head rounded at base, width behind eyes 0.44 mm, width at antennal insertions 0.28 mm, length 0.60 mm, eyes oval, broadest dorsally 0.10 × 0.13 mm, antennae moderately pubescent, segments II–IV narrow, VI–XI gradually increasing in width; head very sparsely pubescent, with few tactile setae.

Pronotum polished, sparsely pubescent with few tactile setae, pubescence appressed, pronotum deeply constricted in basal half, with saddle-like depression on dorsum, pronotal length 0.69 mm, width at base 0.30 mm, width at constriction 0.19 mm, distance from base to constriction 0.20, greatest width 0.42 mm at 0.47 mm from base.

Elytra polished with distinct pubescence at 30 degree angle or greater, length 0.08 mm, tactile setae length 0.16 mm, length of elytra 1.32 mm, width at humeri 0.60 mm, greatest width 0.77 mm at 0.51 mm from base, marking 0.20 mm from base, 0.11 mm long, elytral depression indistinct in lateral view.

Mesepisternal setae reaching humeral angle, length 0.14 mm, profemur swollen, length 0.41 mm, width 0.13 mm; protibia slender, length 0.43 mm; mesofemur swollen in distal two-thirds, length 0.47 mm, width 0.12 mm; mesotibia length 0.42 mm, metafemur swollen in distal one-half, length 0.61 mm, width 0.12 mm, metatibia length 0.58 mm.

Gonopore armature with a biarmed sclerite with very short stem, an additional sclerite projects anteriorly from distal portion of each arm, reaching mouth of primary gonopore. In lateral view biarmed sclerite curved, lateral sclerite straight.

FEMALE.—Similar to male.

DISTRIBUTION.—Northeastern Argentina in Buenos Aires Province; one doubtful record from Chile in the Bowditch Collection (Harvard).

ARGENTINA: *Buenos Aires*: Llavalol, 1906, R. Thaxter; vic. La Plata, 2 January 1963, F. G. Werner; Prov. Buenos Aires, 26 August 1917, C. Bruch. CHILE: Chi., F. C. Bowditch Collection.

FORMICILLA GRANDICEPS Pic

(Figs. 2b, 7)

Formicilla grandiceps Pic 1913, 130 (Type-loc.: Chaco du Paraguay). Bruch 1928, 192–193.
Formicilla Garciai [sic] Pic 1948, 15–16 (Type-loc.: Buenos Ayres, Argentina). NEW SYNONYMY.
Formicilla garciai, Werner 1965, 4, 8.

Length 1.80–2.00 mm, polished, sparsely punctate, head and pronotum castaneous, elytra slightly darker with two luteous markings on each elytron, both markings sometimes reaching sides but only anterior markings may meet at elytral suture, anterior marking in elytral depression.

MALE.—Salobra, Brazil: length 1.84 mm, head subtruncate at base, length of head 0.42 mm, width behind eyes 0.33 mm, width at antennal bases 0.17 mm, eyes oval, broadest dorsally 0.07 × 0.08 mm, antennae moderately pubescent, antennal segments II–IV slender, V–XI slowly increasing in width; head very sparsely pubescent and with few tactile setae.

Pronotum constricted in basal half, very shallow depression on dorsum, sparsely setate and pubescent, pubescence appressed, length of pronotum 0.45 mm, width of constriction 0.15 mm, distance from base to constriction 0.10 mm, greatest width 0.28 mm at 0.29 mm from base, width at base 0.21 mm.

Elytra polished with numerous tactile setae and with pubescence decumbent, length of pubescence 0.04 mm, length of tactile setae 0.12 mm, length of elytra 0.97 mm, width at humeri 0.42 mm, greatest width 0.58 mm at 0.46 mm from base, elytral depression indistinct.

Metepisternal setae reaching humeral angle, 0.05 mm long, profemur swollen, length 0.33 mm, width 0.12 mm, protibia slightly dilated to apex; 0.24 mm long, mesofemur swollen in distal two-thirds, 0.34 mm long, width 0.08 mm; mesotibia slender, 0.29 mm long, metafemur swollen in distal one-half, length 0.33 mm, width 0.07 mm, metatibia 0.39 mm long.

Gonopore armature with tips broadened, in lateral view curved and appearing spoon-shaped.

FEMALE.—Similar to male, but longer.

This species is most similar to *F. longipilosa* because of the shallow pronotal depression and the indistinct elytral depression.

DISTRIBUTION.—From northern Argentina and southcentral Brazil through the higher lands of the Amazon drainage to Venezuela.

ARGENTINA: *Misiones*: Iguazú, 20 January/13 March 1945, Hayward, Willink, Golbach. BOLIVIA: *Sta. Cruz*: El Cidral, ca. 100 km. NNW Sta. Cruz, 450 m., UV lt. trap, January 1962, R. Golbach. BRAZIL: *Mato Grosso*: Salobra, January 1955, P. Pereira; Xingu National Park, Jacaré, November 1961, M. Alvarenga, W. Bokermann; Cuyaba. VENEZUELA: *Miranda*: Agua Fria, El Jacillo, 14 July 1964, 1500777, C. J. Rosales, P. J. Salinas. *Portuguesa*: Guanaré, 10/13 September 1957, Borys Malkin.

Formicilla longipilosa Chandler new species

(Fig. 9)

Polished, sparsely punctate, head and pronotum testaceous, elytra same color with humeri and two markings on each elytron brown, markings oval, not reaching flanks of elytron, posterior markings joining at elytral suture, appendages similar in color to pronotum.

HOLOTYPE MALE.—Length 2.12 mm, head evenly rounded when viewed in plane from base to apex, width behind eyes 0.34 mm, width at antennal insertions 0.19 mm, length 0.49 mm, eyes rounded, truncate toward base of antennae, broadest dorsally 0.11 × 0.12 mm. Antennal segments moderately pubescent, pubescence

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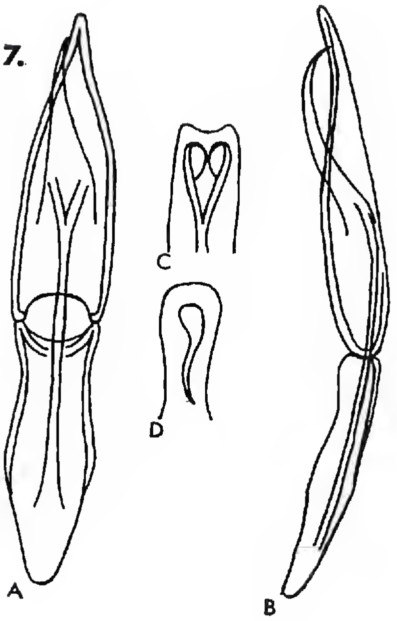

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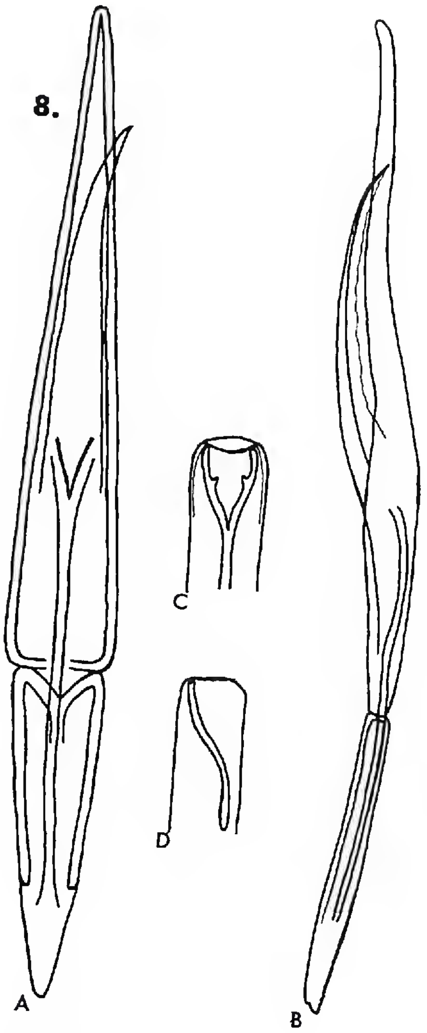

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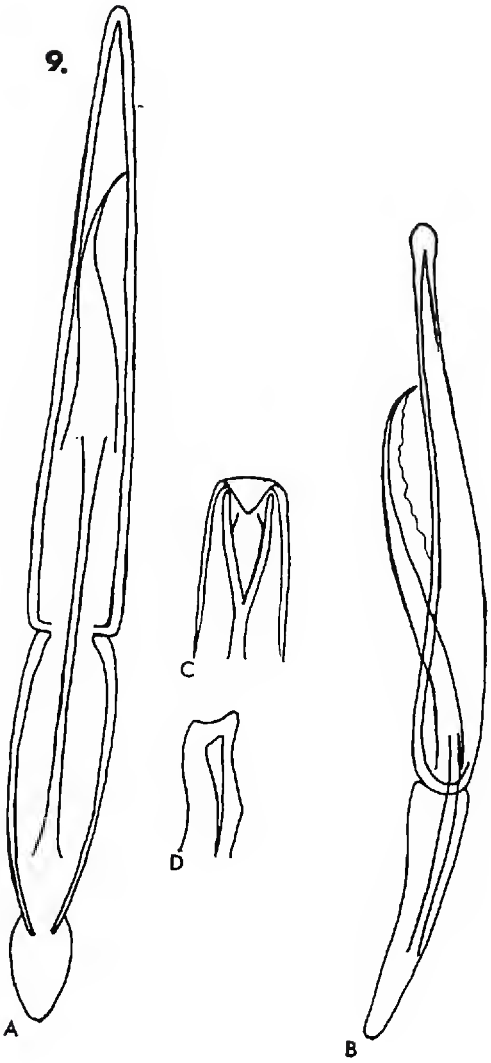

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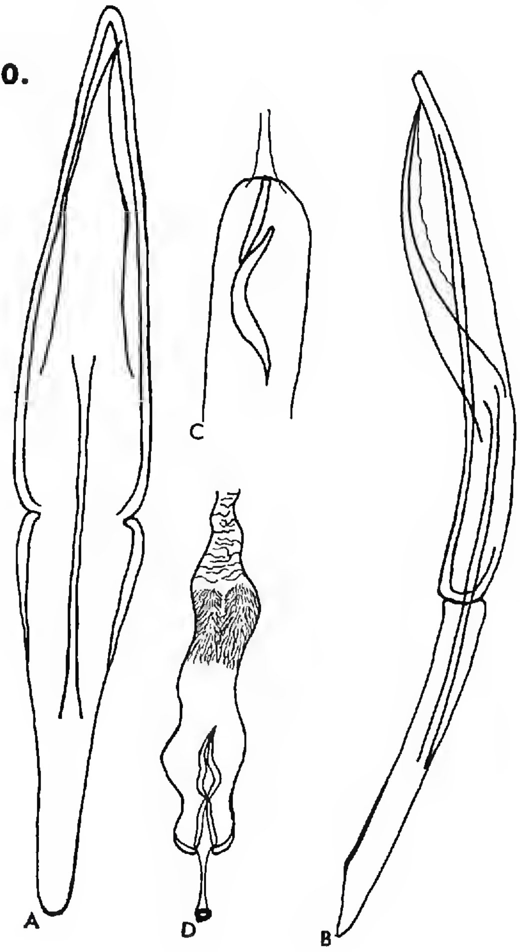

increasing distally, segments II–V narrow, VI–XI gradually increasing in width, head very sparsely pubescent and with few tactile setae.

Pronotum polished, with both sparse pubescence and tactile setae, deeply constricted in basal half, dorsum almost level, length 0.57 mm, width at base 0.25 mm, width at constriction 0.22 mm, length from constriction to base 0.16 mm, greatest width 0.33 mm at 0.38 mm from base.

Elytra polished with distinct pubescence and numerous tactile setae, pubescence at 30 degree angle from elytra, longest along flanks 0.09 mm, tactile setae length 0.12 mm, row of distinct punctures adjacent to and paralleling elytral suture, indistinct elytral depression, length of elytra 1.12 mm, width at humeri 0.45 mm, greatest width 0.60 mm at 0.41 mm from base, first marking 0.30 mm from base, 0.21 mm long, second marking 0.70 mm from base and is 0.19 mm long.

Mesepisternal setae not reaching humeral angle, length 0.10 mm, profemur swollen, length 0.30 mm, width 0.08 mm, tibia slender, length 0.33 mm; mesofemur swollen in distal two-thirds, length 0.41 mm, width 0.07 mm, mesotibia length 0.34 metafemur swollen in distal one-half, length 0.52 mm, width 0.08 mm, metatibia straight, length 0.04 mm.

Gonopore armature narrow with indistinct projections, no widened areas, in lateral view, a narrow triangle.

Female.—Similar to male, but with mesepisternal setae reaching humeral angle, head subtruncate. Females in type series are slightly shorter than the male, 1.98–2.07 mm.

This species is most similar to *F. grandiceps* by its indistinct elytral depression and very shallow depression on the dorsum of the pronotum. However, the gonopore armature is most similar to that of *F. alta*, not broadened anteriorly as in *F. grandiceps.*

Holotype male, Chilpancingo, Guerrero, Mexico, D. M. Delong, 1941, at light. Paratypes: 3 females, eutopotypical.

Formicilla munda LeConte

(Figs. 1b, 2a, 3b, 4, 5, 11)

Formicilla munda LeConte 1851, 152–153 (Type loc.: on lower part of Colorado River). Casey 1895, 646. Pic 1911, 22. Beal 1950, 126.

Anthicus [*Formicomus*, *Formicilla*] *mundus*, LeConte 1852, 95.

Formicilla evanescens Casey 1895, 646–647 (Type loc.: Austin, Texas). Pic 1911, 22. Beal 1950, 128–129 (*Formicilla scitula evanescens* in part). NEW SYNONYMY.

Formicilla gilensis Casey 1895, 647 (Type loc.: Tucson, Arizona). Pic 1911, 22. Beal 1950, 125–126. NEW SYNONYMY.

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Figs. 7–9. Genitalia: a. ventral view, b. lateral view; gonopore armature: c. ventral view, d. lateral view. Fig. 7. *F. grandiceps.* Fig. 8. *F. alta.* Fig. 9. *F. longipilosa.* Fig. 10. *F. bruchi* genitalia: a. ventral view, b. lateral view; gonopore armature: c. lateral view; internal sac: d. ventral view.

Formicilla munda munda, Beal 1950, 126–127. NOT: *Formicilla munda gracilipes*, Beal 1950, 127–128.

Color of head and pronotum varying from luteous to fulvous, head sometimes darker than pronotum, elytral markings always luteous with elytral basement color varying from fuscopiceous to brown, light markings vary in width depending on darkness of specimen, markings wider in lighter specimens and narrower in darker specimens, markings of lighter specimens may join on elytral flanks, first marking continuous across elytra while second marking continuous only in lighter specimens. Elytral depression distinct, shape of base of head varies from subtruncate to rounded and pubescence on pronotum and elytra varies from appressed to elevated at 30 degree angle, length 1.80–2.40 mm.

MALE.—Hermosillo, Mexico: 2.31 mm long; base of head subtruncate, sparsely pubescent and setate, pubescence appressed, length of head 0.52 mm, width behind eyes 0.41 mm, width at antennal bases 0.22 mm, eyes oval, broadest dorsally 0.11 × 0.12 mm, antennal segments II–VI slender, VII–XI gradually increasing in width, antennae moderately pubescent, pubescence increasing in distal segments.

Pronotum deeply constricted in basal half, dorsum varies from slightly concave to level, sparsely setate and pubescent, pubescence depressed to elevated, length of pronotum 0.55 mm, width at constriction 0.25 mm, length from base to constriction 0.15 mm, widest anteriorly 0.42 mm at 0.39 mm from base, width at base 0.32 mm.

Elytra polished with pubescence varying from depressed to elevated at 30 degree angle, length of pubescence 0.06 mm, tactile setae length 0.12 mm, length of elytra 1.26 mm, width at humeri 0.51 mm, maximum width 0.69 mm at 0.48 mm from base, distance from base to first marking 0.13 mm, length of marking 0.13 mm, distance from base to posterior marking 0.65 mm, length 0.19 mm.

Mesepisternal setae reaching humeral angle, length 0.14 mm, profemur swollen, length 0.38 mm, width 0.11 mm, protibia 0.37 mm long; mesofemur swollen in distal two-thirds, length 0.40 mm, width 0.09 mm; mesotibia 0.41 mm long, metafemur swollen in distal one-half, length 0.56 mm, width 0.11 mm, metatibia 0.56 mm long.

Gonopore armature biarmed with median projection on each arm reaching to primary gonopore; in lateral view projections very distinct.

FEMALE.—Similar to male.

This species is most similar to *F. alta* because of the distinct elytral depression and the gonopore armature having a median projection, although the gonopore armature is slender and not so developed as in *F. alta*.

Division into subspecies has been considered for *F. munda*. However, I feel this classification would not be realistic because the different colored populations are separated into several disjunct populations (Fig. 11).

DISTRIBUTION.—This species ranges from Morelos, Mexico, through the lower elevations of Sonora and Arizona into the Central Valley of California and east to Arkansas.

UNITED STATES: *Arizona*: Apache Co.: White Mtns. Cochise Co.: Willcox. Coconino Co.: Sedona. Gila Co.: Globe, Wheatfields-nr. Globe, Roosevelt Lake. Graham Co.: Safford, Thatcher. Maricopa Co.: Buckeye, Gillespie Dam-Gila Bend, Phoenix, Wickenburg. Pima Co.: Brown Cyn.-Baboquivari Mtns., Green Valley, Picture Rock Pass and Ariz-Son. Desert Museum-Tucson Mtns., Robles Ranch, Sabino Cyn.-Sta. Catalina Mtns., Tucson, 8 mi. N. Vail. Pinal Co.: Coolidge, Superior. Santa Cruz Co.: Madera Cyn., Nogales. Yavapai Co.: Bloody Basin, Cottonwood. Yuma Co.: Dateland, Ehrenberg, Laguna Dam, Palomas, Roll, Yuma. *Arkansas*: Howard Co.: 5 mi. N. Nashville. Pike Co. *California*: Imperial Co.: "Brawleys," "Fr. Yuma," Imperial, E. shore Salton Sea. Madera Co.: Visalia. Merced Co.: 4 mi. S. Dos Palos, Merced. Riverside Co.: Cathedral City. San Bernardino Co.: 4 mi. S. Colton. San Diego Co.: La Mesa. Tehama Co.: Red Bluff, 20 mi. NW. Red Bluff, 1 mi. SE. Vina. *Colorado*: El Paso Co.: Colorado Springs. *Louisiana*: Bossier Co.: Bossier Parish. *New Mexico*: Doña Ana Co.: Las Cruces, Mesilla Park. *Oklahoma*: Texas Co.: Texahoma. *Texas*: Brazos Co.: College Station-Texas A&M. Brown Co. Comal Co.: New Braunfels. Dallas Co.: Dallas. Grayson Co.: Denison. Hidalgo Co.: Brownsville. Llano Co.: Llano. Nueces Co.: Corpus Christi. Patricio Co.: Sinton. Potter Co.: 14 mi. E. Amarillo. Terrell Co.: Sanderson. Victoria Co. MEXICO: *Baja California*: La Paz, 4 mi. N. Todos Santos. *Morelos*: 5 mi. S. Cuernavaca. *Nayarit*: Acaponeta, Ixtlan del Rio. *Sinaloa*: 6 mi. S. Culiacan, Los Mochis, Mazatlan, 26 mi. N. Pericos. *Sonora*: Alamos, Desemboque, 5 mi. N. Guaymas, Hermosillo, 40 mi. N. Hermosillo, Navajoa, Nogales.

Formicilla alta Chandler new species

(Figs. 3a, 8)

Polished, sparsely pubescent, head and pronotum flavous to tawny, elytra fulvous to tawny with two castaneous markings on each elytron, both of which may or may not meet at elytral suture or extend to sides, humeri darkened, elytral depression distinct.

HOLOTYPE MALE.—Length 1.98 mm, head rounded at base, pubescence sparse and appressed, few tactile setae, length of head 0.46 mm, width behind eyes 0.33 mm, width at antennal bases 0.18 mm, eyes rounded and truncate close to mandibles 0.08 × 0.09 mm, antennae moderately pubescent, pubescence increasing distally, segments II–IV of equal width, VII–XI gradually increasing in width.

Pronotum polished, sparse pubescence appressed, few tactile setae; deeply constricted in basal half with dorsum flat, lengh 0.48 mm, width at base 0.26 mm, width at constriction 0.20 mm, length from base to constriction 0.14 mm, greatest width 0.32 mm at 0.33 mm from base.

Elytra polished with pubescence varying from depressed to elevated at 30 degree angle, length pubescence 0.06 mm, length tactile setae 0.12 mm, length elytra 1.04 mm, width at humeri 0.50 mm, greatest width 0.58 mm at 0.58 mm from base, first marking 0.31 mm from base and 0.27 mm long, second marking 0.72 mm from base and 0.14 mm long.

Mesepisternal setae reaching humeral angle, length 0.15 mm, profemur swollen, length 0.34 mm, width 0.11 mm, protibia 0.31 mm long; mesofemur swollen in distal two-thirds, length 0.38 mm, width 0.10 mm, mesotibia length 0.34 mm; metafemur swollen in distal half, length 0.45 mm, width 0.08 mm, metatibia length 0.43 mm.

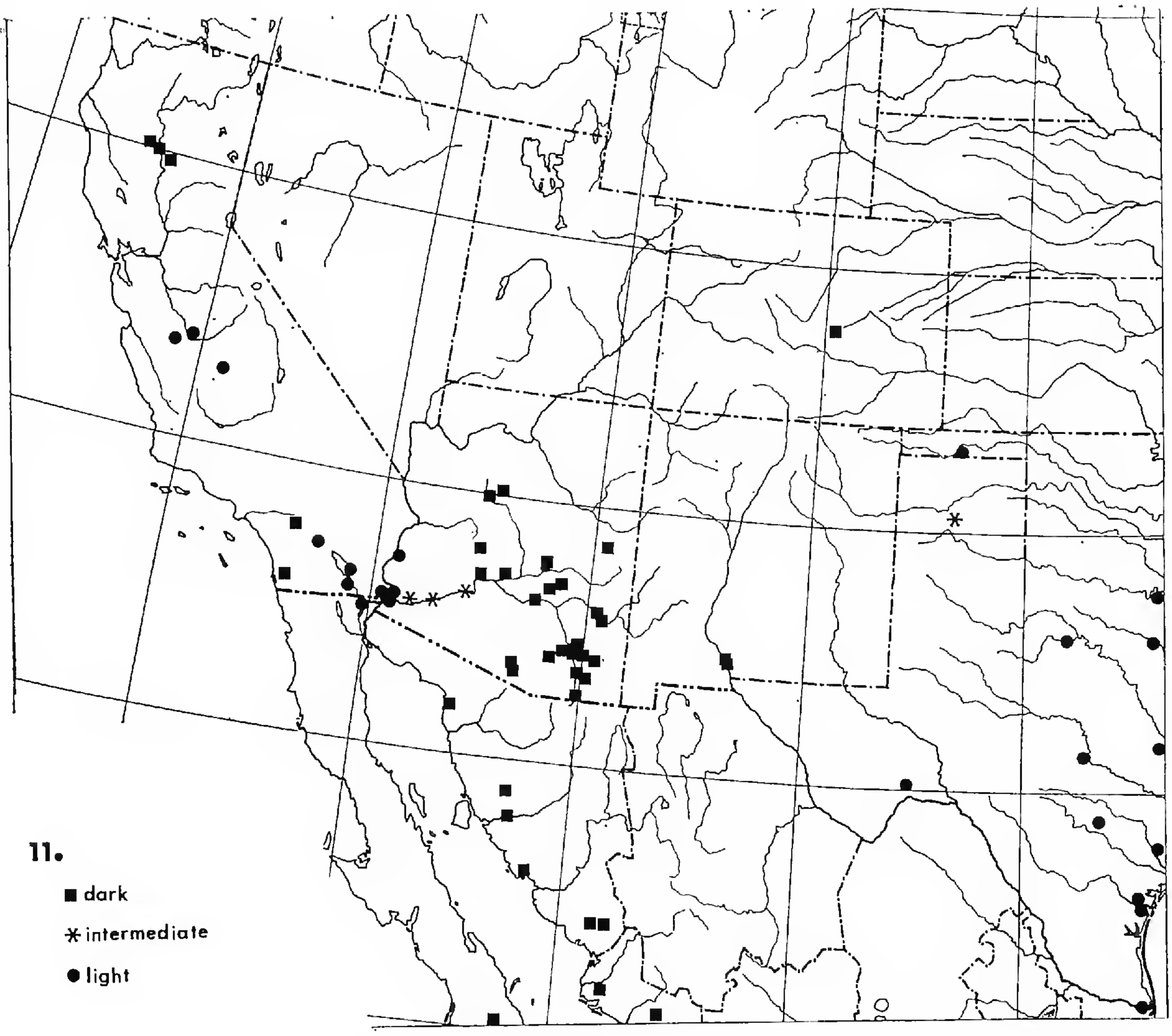

Fig. 11. Distribution of color populations of *F. munda*.

Gonopore armature slender and curved in lateral view with short, stubby projections.

FEMALE.—Not known.

The shape of the gonopore armature closely resembles that of *F. longipilosa*, but the flat pronotal dorsum and distinct elytral depression indicate close relationship to *F. vitrea*.

Holotype male, MIL CUMBRES, 30 KM. W. HIDALGO, MICHOACAN, MEXICO, (Rt. 4, Km. 244), 7,600 ft., in grass on edge of road, 29 June 1948, F. G. Werner. Paratype: 1 male, eutopotypical.

Formicilla vitrea Chandler new species

(Fig. 6)

Polished, sparsely pubescent, head and pronotum castaneous, fuscopiceous elytra with two luteous markings on each elytron, first marking in elytral depression, not reaching distal edge of elytra but meeting at elytral suture, second marking smaller, sometimes meeting at elytral suture, elytral depression distinct, length varies from 1.85–2.28 mm.

HOLOTYPE MALE.—Length 2.17 mm, head subtruncate at base, pubescence sparse and appressed, few tactile setae, length of head 0.45 mm, width at antennal bases 0.20 mm, width behind eyes 0.39 mm, eyes oval, broadest dorsally 0.07 × 0.08 mm, antennae moderately pubescent and setate, pubescence increasing distally, segments II–V of equal width, VI–XI barely increasing in width.

Pronotum polished, sparse appressed pubescence, few tactile setae; deeply constricted in basal half with dorsum flat, length of pronotum 0.54 mm, width at base 0.28 mm, width at constriction 0.24 mm, length from base to constriction 0.14 mm, widest point 0.39 mm at 0.38 mm from base.

Elytra polished with pubescence depressed to elevated at 30 degree angle, length pubescence 0.05 mm, length tactile setae 0.12 mm, length elytra 1.18 mm, width at humeri 0.45 mm, greatest width 0.07 mm at 0.49 mm from base, first marking 0.14 mm from base and 0.08 mm in length, second marking 0.63 mm from base and 0.14 mm in length.

Mesepisternal setae reaching humeri, length 0.14 mm, profemur swollen, length 0.40 mm, width 0.13 mm, protibia slender, length 0.36 mm; mesofemur swollen in distal two-thirds, length 0.41 mm, width 0.09 mm, mesotibia 0.39 mm long; metafemur swollen in distal half, length 0.51 mm, width 0.11 mm, metatibia length 0.50 mm.

Gonopore armature thick in lateral view with large, blunt projections, very short basal arm.

FEMALE.—Similar to male.

The gonopore armature is very distinct and quite different from that of the other species. The flat pronotal dorsum indicates affinities to *F. alta.*

Holotype male, 20 KM. W. LAGOS, JALISCO, MEXICO, dry agricultural area (running on damp ground among grass stems next to ditch), 6,130 ft., 2 August 1948, F. G. Werner.

PARATYPES.—13 males, 7 females, eutopotypical; 1 male, 49 mi. SE. Chihuahua, Chihuahua, MEX., 4,000 ft., light, San Pedro River, 20 July 1952, RB & BK Selander; 1 female, 16 km. W. Jalostotitlan, Jalisco, MEX., 5,920 ft., (Rt. 170), (Dry grazing area, under human dung), 1 July 1948, W. Nutting.

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SCIENTIFIC NOTE

A Note on *Dacnochilus fresnoensis* (Coleoptera:Staphylinidae).—Hugh B. Leech described *Dacnochilus fresnoensis* in 1939 (Can. Entomol., 71: 261) on the basis of a male collected at Fresno, California 5 June, 1931 and a female from the same locality 23 June, 1930, both by Roy S. Wagner. The species has not been mentioned in the literature since and to my knowledge until now no other specimen has been found.

Only two other species are known in this genus, the habits of the members of which are unknown. The closely related *Acalophaena* is represented by several species in Latin America one of which, *A. basalis* Lynch-Arribálzaga, was reported in 1884 by its describer from termite nests (Bol. Acad. Nac. Cienc. Cordoba, 7: 270).

I have received from Derham Giuliani a single male of *Dacnochilus fresnoensis* collected by him at "Riverside, California on August 16, 1971 on log with ants and termites." In reply to my request for more information about this rare find Giuliani wrote:

"Concerning the specimen of *Dacnochilus fresnoensis*, I collected it at Dr. Fisher's house when I was in Riverside last August. You were away on a trip at the time. He could show you the log and perhaps recall some details I've forgotten. I helped him move the log his wife wanted put at a spot in the garden. It contained large numbers of ants and termites. Debris with ants and termites fell off here and there during the move and it was near this that I spotted the staph walking about. I looked on the log and back at the spot it had been moved from but saw no more. Unfortunately I did not collect any of the ants or termites even though I felt certain that the staph had been among them."

Conversations with Dr. T. W. Fisher (U.C.R.) revealed that the log was one of three alder logs which had been brought to his home about two years before from Lytle Creek, San Bernardino County, California about thirty miles to the northwest of the collecting site. Visits to his place, on a chaparral-covered hill at Sunnymead, Riverside County, California, were made on 31 April and 17 June, 1972, a year of very little rainfall. No ants or termites were found on or under the three logs, two of which were still in their original position. No more *Dacnochilus* were found.—IAN MOORE, *Division of Biological Control, University of California, Riverside 92502.*